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THE DIMENSIONALITY OF NATIONS PROJECT

FACTOR 2

RESEARCH REPORT

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DIMENSIONALITY OF NATIONS PROJECT
QUARTERLY TECHNICAL REPORT NO. 13

APRIL 1, 1971 TO JUNE 30, 1971

FACTOR 1

DEPARTMENT OF POLITICAL SCIENCE
UNIVERSITY OF HAWAII

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THE DIMENSIONALITY OF NATIONS PROJECT
Department of Political Science
University of Hawaii

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13. ABSTRACT

In this quarter, Status Theory was subsumed under the analytic framework of Field Theory in a paper, "A Status-Field Theory of International Relations." To assess the new theory within the context of past history and other international relations theories, library research has been carried out through the period. Additional tests of Field Theory, this time using data on Communist China, evidenced the theory's universality.

Study of action-oriented policy analysis was extended to develop practical pedagogical technique in college teaching. A new non-metric multidimensional scaling program has been developed and was added to the DON computer program library. Data collection continued throughout the quarter.

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INTRODUCTION

This thirteenth quarterly report is divided into seven sections. The first describes the analyses initiated and completed during the quarter; the results of special significance are highlighted. Methodological problems faced during the analyses along with any computer programs that have been written or revised during the quarter are discussed in the second section. In this and the previous section, technical terms and discussions are avoided where possible. The third section describes the data collections begun and completed during the quarter. Current personnel, personnel commitments made and consultation are noted in the fifth section. The sixth section covers project publications, research reports, and monographs in preparation and completed. The final section delineates changes in the DON budget, status of subcontracts, and expenditures to date.

It should be noted that quarterly reports often describe analyses in process and present tentative results not yet in the final form. Therefore, many of the analyses and results presented cannot be keyed to any document elaborating on them. Whenever possible, such references will be made.

I. ANALYSES

1.1 Status-Field Theory

Two theories, among others, currently invigorate theoretical and empirical international relations research. One is Field Theory, based on the idea that nation similarities and differences cause international behavior. The other is Status Theory, derived largely from the sociological status literature, which argues that international behavior is caused by status rank and disequilibrium.

Both theories ground behavior on nation attributes, thus providing an avenue for subsuming status theory within field theory. First, among the many dimensions spanning nation attributes, two -- economic development and power basis can be defined as status dimensions. These position nations on their relative statuses in field theory's attribute space.

Second, Status Theory's two key concepts -- rank and status disequilibrium -- can be defined for nations by status dimensions and, most importantly, for dyads by nation status differences (distance vectors). This latter definition is the implement used to create Status-Field Theory, since for Field Theory, distance vectors are the forces toward behavior.

Finally, Status and Field Theory can be combined to say that status dependent, dyadic, cooperative, and conflict behavior of economically underdeveloped nations is inversely related to their economic development differences.

The development of a Status-Field Theory enriches both theories. Status Theory is given a mathematical representation with clear functions and tests. Moreover, Status-Field Theory explicitly considers status and status behavior as being related to other behavior and attributes.

1.2 Teaching Practical Policy Analysis

Students can learn to grapple with real political problems by doing policy analyses, studies designed to produce well-supported recommendations for action dealing with particular problems. Instead of asking what is being done about particular issues, they could ask what should be done. These questions could be examined in a systematic and analytic way, in a variety of formats. Engagement in political studies of this kind can develop the student's skill at analyzing and managing real political problems, it can enhance his sense of efficacy, and it can provide him with a firmer grasp of political concepts and information than would be obtained with traditional teaching methods.

1.3 Testing Some Hypotheses about Delegate Attitudes at the United Nations and Some Implications for Theory Building.

When United Nations delegates were asked to mark a questionnaire probing matters concerning the United Nations system and international affairs, different behavioral patterns emerged within groups of cooperating delegates. For the most part, delegates generally seem "positive" in regard to both their wishes and perceptions. When the questionnaire scores were related to independent variables (factors calculated from attributes concerning the respondents' home states) two variables were best able to predict delegate wishes and perceptions: "Development" and "Authoritarianism." High scores in both cases were related to negative questionnaire responses. This finding reinforces the importance of "Development" as a predictor of U.N. delegate attitudes, and suggest that another factor, "Authoritarianism," may also be of some importance. These findings also appear to have considerable relevance for notions developed under the concepts of Attribute and Field Theory.

1.4 Comparison of Charles A. McClelland and DON Foreign Conflict Data.

Relevant to assessing DON's conflict results is knowing whether the DON versus McClelland interpretations of conflict behavior influence the recording of conflict patterns. Findings suggest at least fifty percent variance in common between the two sets of data. Two major patterns, one dealing with the recording of military violence and the other with negative communications are quite similar. There are some differences in the recording of negative sanctions and unofficial acts of violence.

1.5 Communist China's Foreign Behavior: An Application of Field Theory Model II.

This research attempted to explain Communist China's system of foreign relations by examining her differences and similarities with each other nation. With Rummel's Field Theory as a guide, a theoretical model of foreign behavior decision-making system was formulated. The research focused on determining China's idiosyncratic systems of both perceptions of attribute distances and behavioral preferences. The findings include the following: 1) Linear linkage between the attribute distances of the nations from China and China's behavior toward those nations, which was proposed by field theory, was found to exist within a satisfactory margin of error. This finding strongly supports the validity of field theory; 2) China's foreign behavior patterns were delineated in the form of seven canonical structure equations, one of which says that China's joint conflict behavior and trading behavior toward other nations is the function of the power distance between China and the object nation; 3) in general, attribute differences between China and other nations explain about fifty-three percent of the variation in China's foreign behavior toward them.

II. METHODOLOGY AND COMPUTER PROGRAMS

TORSCA9, a Fortran IV program for nonmetric multidimensional scaling has been added to the DON program library and is available using the CODE0991 procedure. The program computes a geometric representation of a data matrix such that the distances between the points in the representation best produce the order of the entries in the data matrix.

During this period, data were collected for the following variables.

Relative IGOs 1960
Relative NGOs 1960
IGO A-B / common membership of A 1960

NGO A-B / common membership of A 1960
Medicine NGO / NGO 1960
Law NGO / NGO 1960
Arts and Culture NGO / NGO 1960
Threats 1960
Accusations 1960
Killed in Foreign Violence 1960
Military action or not 1960
Protests 1960

IV. PERSONNEL

4.1 Project Director

Professor R. J. Rummel, Director of DON, has completed the final draft of the paper, "A Status-Field Theory of International Relations" (Research Report No. 50).

Continuing from the previous period, library research related to Status-Field Theory has been carried out under his direct supervision, especially on the following: a) the history of China, India, and Japan, b) classical international relations and history and c) social philosophies of India, China, and Japan during the classical period.

4.2 Assistant Director

Professor Warren R. Phillips presented Research Report No. 39, "A Mathematical Theory of Conflict Dynamics" at the meeting of the Michigan Events Interaction Conference in April. He also talked at Ohio State University on Research Report No. 49, "The Dynamics of Behavioral Conflict" and at Michigan State University on his recent paper, "Progression Predicting Conflict Exchanges."

4.3 Associate Researchers

Professor George Kent presented Research Report No. 55, "The Evaluation of Policy Alternatives," at the meeting of the Western Political Science Association in Albuquerque in April. The policy analysis and peace research themes were pursued in his work throughout the quarter. He redrafted an earlier essay on "Teaching Practical Policy Analysis," which now appears as DON Research Report No. 56, and wrote a brief paper on "Action Oriented Peace Education" to serve as a basis for discussion for a session at the Workshop on World Order to be held in Oregon in July.

During May, Professor Kent, who has been serving as the DON Project representative to the Consortium on Peace Research, Education, and Development, was elected to the Executive Committee of that organization. He has also been named to serve as a member of the Council of another organization, the Council for a Department of Peace.

Professor Jack E. Vincent has left the DON Project to resume his teaching job at Florida Atlantic University.

Dr. Gordon Hilton of the Richardson Institute, London, came to the DON Project on June 25th. He was invited by the principal investigator as a consultant to do an evaluation and critique of the DON Project for the next three months. Dr. Hilton has done a similar critique of the "Conflict and Cooperation Studies Project," (principal investigator: Professor Robert North) at Stanford University. Dr. Hilton will be looking primarily at what we have done, what kinds of questions we are asking, how well we have answered these questions, what contributions we have made to knowledge, the attitudes of others of the profession towards the project, and what is the overall research context in which the project sits.

V. DON ACTIVITIES

5.1 DON Staff Meetings

DON staff meetings are held for two hours once a week. Interested members of the University community are invited to attend, as well as the DON staff. These meetings serve to communicate the latest DON findings, ongoing subprojects and critiques of the research in progress. The meetings' format is one within which outside scholars doing relevant research can discuss their findings.

The following is a list of speakers and their topics of discussion during the last quarter: George Kent (The Evaluation of Policy Alternatives); Jack Vincent (Empirical Studies on the United Nations); Charles Wall (The Latest Development in the Missing Data Estimation Program); Jack Vincent (Critique of Field Theory); and R. J. Rummel (The Proposed DON Graduate Program in IR).

VI. PUBLICATIONS AND REPORTS

6.1 Research Reports

Vincent, Jack. "Testing Some Hypotheses about Delegate Attitudes at the United Nations." April 1971 Research Report No. 52

Wall, Charles and Alan C. H. Kam. "DYNA: Dynamic Storage and Allocation in Fortran for the IBM/360 Operating System." April 1971 Research Report No. 53.

Kent, George. "Teaching Practical Policy Analysis." April 1971. Research Report No. 56.

VII. BUDGET

7.1 Fiscal Status

7.1.1 Amount Funded

The total amount (09-01-67 to 08-31-71) is \$652,846, of which \$200,000 is funding for year -04 (09-01-70 to 08-31-71).

7.1.2 Estimated Expenditures and Commitments:

Total Expenditures to date (09-01-67 to 06-30-71) \$602,758

Total Estimated Expenditures (09-01-67 through 08-31-71) \$652,846

7.1.3 Estimated Funds Required: Approximately \$750,000. This takes into account the five-year research plan of the project, only four years of which is currently funded.